

TABLE 1 — METAL RECEIVING TUBES

Characteristics given in this table apply to all tubes having type numbers shown, including metal tubes, glass tubes with "G" suffix, and bantam tubes with "GT" suffix. For "G" and "GT" tubes not listed (not having metal counterparts), see Tables II, VII, VIII and IX.

Type	Name	Socket Connections	Cathode	Fil. or Heater Volts	Amps.	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transconductance Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type
6A8	Pentagrid Converter	8A	Htr.	6.3	0.3	Osc.-Mixer	250	-3.0	100	3.2	3.3	Anode-grid (No. 2) 250 volts max. thru 20,000-ohms	5000	3500	—	—	6A8
6AB7	Television Amp. Pentode	8N	Htr.	6.3	0.45	Class-A Amplifier	300	-3.0	200	3.2	12.5	700000	—	—	—	—	6AB7
1853	Television Amp. Pentode	8N	Htr.	6.3	0.45	Class-A Amplifier	300	-2.0	150	2.5	10	750000	9000	6750	—	—	1853
6AC7	Television Amp. Pentode	8N	Htr.	6.3	0.45	Class-A Amplifier	300	-2.0	150	2.5	10	750000	9000	6750	—	—	6AC7
1852	Television Amp. Pentode	8N	Htr.	6.3	0.45	Class-A Amplifier	300	-2.0	150	2.5	10	750000	9000	6750	—	—	1852
688	Duplex-Diode Pentode	8E	Htr.	6.3	0.3	Pentode R.F. Amplifier	250	-3.0	125	2.3	9.0	650000	1125	730	—	—	688
6C5	Triode Detector, Amplifier	6Q	Htr.	6.3	0.3	Pentode A.F. Amplifier	250	-4.5	50	—	0.65	—	—	—	—	—	6C5
6F5	High- μ Triode	5M	Htr.	6.3	0.3	Class-A Amplifier	250	-8.0	—	—	8.0	10000	2000	90	—	—	6F5
6F6	Pentode Power Amplifier	7S	Htr.	6.3	0.7	Class-A Amplifier	250	-17.0	—	—	—	Plate current adjusted to 0.2 ma. with no signal	—	—	—	—	6F6
6H6	Twin Diode	7Q	Htr.	6.3	0.3	Class-A Amplifier	250	-1.3	—	—	0.2	66000	1500	100	—	—	6H6
6J5	Detector Amplifier Triode	6Q	Htr.	6.3	0.3	Class-A Amplifier	250	-16.5	250	6.5	34	80000	9500	900	7000	3.0	6J5
6J7	Triple-Grid Detector, Amplifier	7R	Htr.	6.3	0.3	Class-A Pentode	315	-22.0	315	8.0	42	75000	2650	200	7000	5.0	6J7
6K7	Triple-Grid Variable- μ Amplifier	7R	Htr.	6.3	0.3	Class-A Triode	250	-20	—	—	31	2600	2700	7.0	4000	0.85	6K7
6K8	Triode Hexode Converter	8K	Htr.	6.3	0.3	Push-Pull Class-AB Amp. Pentode Connection	375	-96	250	2.5	17	Power output for 2 tubes at stated load, plate-to-plate	—	—	10000	19	6K8
6L6	Beam Power Amplifier	7AC	Htr.	6.3	0.9	Rectifier	350	-38	—	—	22.5	—	—	—	6000	18	6L6
6L7	Pentagrid Mixer Amplifier	7T	Htr.	6.3	0.3	Class-A Amplifier	250	-8	—	—	9	7700	2600	90	—	—	6L7
						R.F. Amplifier	250	-3.0	100	0.5	2.0	exceeds 1.5 meg.	1225	1500	—	—	6J7
						Bias Detector	250	-4.3	100	Cathode current 0.43 ma.	—	—	—	—	0.5 meg.	—	6K7
						R.F. Amplifier	250	-3.0	125	2.6	10.5	600000	1650	990	—	—	6K7
						Mixer	250	-10	100	—	—	—	—	—	—	—	6K7
						Osc.-Mixer	250	-3	100	6	—	—	—	—	—	—	6K8
						Single-Tube Class-A ^{1,5} Amp. Fixed Bias	250	-14.0	250	5.0	7.4	—	—	—	—	—	6K8
						Single-Tube Class-A ^{1,5} Amp. Fixed Bias	375	-9.0	125	0.7	24	—	—	—	—	—	6K8
						Single-Tube Class-A ^{1,5} Amp. Self Bias	375	-17.5	250	2.5	57	—	—	—	—	—	6K8
						Push-Pull AB ^{1,5} Self Bias	250	-13.5	250	5.4	75	—	—	—	—	—	6K8
						Push-Pull AB ^{1,5} Self Bias	300	-11.8	200	3.0	51	—	—	—	—	—	6K8
						Push-Pull AB ^{1,5} Self Bias	375	-9.0	125	0.7	24	—	—	—	—	—	6K8
						Push-Pull AB ^{1,5} Self Bias	250	-16	250	10	190	—	—	—	—	—	6L6
						Push-Pull AB ^{1,5} Self Bias	250	-16	250	10	190	—	—	—	—	—	6L6
						Push-Pull AB ^{1,5} Fixed Bias	400	-25	300	6	102	—	—	—	—	—	6L6
						Push-Pull AB ^{1,5} Fixed Bias	400	-20	250	4	88	—	—	—	—	—	6L6
						Push-Pull AB ^{1,5} Self Bias	400	-93.5	300	7.0	112	—	—	—	—	—	6L6
						Push-Pull AB ^{1,5} Self Bias	400	-19.0	250	4.6	96	—	—	—	—	—	6L6
						Push-Pull AB ^{1,5} Fixed Bias	400	-35	300	6	102	—	—	—	—	—	6L6
						Push-Pull AB ^{1,5} Fixed Bias	400	-20	250	4	88	—	—	—	—	—	6L6
						R.F. Amplifier	250	-3.0	100	5.5	5.3	800000	1100	—	—	—	6L7
						Mixer	250	-6.0	150	8.3	3.3	over 1 meg.	Oscillator-grid (No. 3) voltage = -15.0	—	—	—	6L7

Power Output for 2 tubes.
Load plate-to-plate

Oscillator peak volts = 7.0

Triode Plate (No. 2) 100 volts, 3.8 ma.

22500 6000 135

2500 14000 4.2

4000 11.5

2500 6.5

4500 6.5

14000 4.0

5000 14.5

5000 13.8

6600 3.4

8500 26.5

6600 32

8500 24

3800 60

6000 40

TABLE I—METAL RECEIVING TUBES—Continued

Type	Name	Socket Connections ¹	Cathode	Fil. or Heater Volts	Amps.	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transcon- ductance Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type
6N7	Twin Triode Amplifier	8B	Htr.	6.3	0.8	Class-B Amplifier	250 300	0 0	—	—	—	Power output is for one tube at stated load, plate-to-plate	—	—	8000 10000	8.0 10.0	6N7
6Q7	Duplex-Diode Triode	7V	Htr.	6.3	0.3	Triode Amplifier	250	-3	—	—	1.1	58000	1200	70	—	—	6Q7
6R7	Duplex-Diode Triode	7V	Htr.	6.3	0.3	Triode Amplifier	250	-9	—	—	9.5	8500	1900	16	10000	0.28	6R7
6S7	Triple-Grid Variable- μ	7R	Htr.	6.3	0.15	Class-A Amplifier	250	-3	100	2.0	8.5	100000	1750	1750	—	—	6S7
6SA7	Pentagrid Converter	8R	Htr.	6.3	0.3	Osc.-Mixer	250	0 ⁸	100	8.0	3.4	800000	Grid No. 1 Resistor 20000 ohms	—	—	—	6SA7
6SC7	Twin Triode Amplifier	8S	Htr.	6.3	0.3	Class-A Amplifier	250	-2	—	—	2.0	53000	1325	70	—	—	6SC7
6SF5	High- μ Triode	6AB	Htr.	6.3	0.3	Class-A Amplifier	250	-2	—	—	0.9	66000	1500	100	—	—	6SF5
6SJ7	Triple-Grid Amplifier	8N	Htr.	6.3	0.3	Class-A Amplifier	250	-3	100	0.8	3	1500000	1650	2500	—	—	6SJ7
6SK7	Triple-Grid Variable- μ	8N	Htr.	6.3	0.3	Class-A Amplifier	250	-3	100	2.4	9.2	800000	2000	1600	—	—	6SK7
6SQ7	Duplex-Diode Triode	8Q	Htr.	6.3	0.3	Class-A Amplifier	250	-2	—	—	0.8	91000	1100	100	—	—	6SQ7
6T7	Duplex-Diode Triode	7V	Htr.	6.3	0.15	Class-A Amplifier	250	-3	—	—	1.2	62000	1050	65	—	—	6T7
6V6	Beam Power Amplifier	7AC	Htr.	6.3	0.45	Class-A Amplifier	250	-12.5	250	4.5/6.5	46	52000	4100	218	5000	4.25	6V6
1612	Beam Power Amplifier	7AC	Htr.	6.3	0.45	Class-AB Amplifier 2 Tubes	250	-15	250	5/12	75	—	—	—	10000	8.5	1612
1620	Pentagrid Amplifier	7T	Htr.	6.3	0.3	Class-A Amplifier	300	-20	300	5/13.5	85	—	—	—	8000	13.0	1620
1621	Power Amplifier Pentode	7S	Htr.	6.3	0.7	Class-A, Pentode P. P.	300	-30	300	6.5/13	38/69	—	—	—	4000	5.0	1621
1622	Beam Power Amplifier	7AC	Htr.	6.3	0.9	Class-A Triode P. P.	327.5	-27.5 ⁶	—	—	55/59	—	—	—	5000	2.0	1622
1851	Television Amp. Pentode	7R	Htr.	6.3	0.45	Class-A Amplifier	300	-20	250	4/10.5	86/125	—	—	—	4000	10	1851
							300	-27	150 ²	2.5	10	750000	9000	6750	—	—	

¹ See Receiving Tube Diagrams.² From fixed screen supply. If series resistor from plate supply is used, use 6AB7/1853 is 30,000 ohms, for 6AC7/1852 and 1851 60,000 ohms. Series resistor gives variable- μ characteristic, fixed screen supply gives sharp cut-off.³ Screen tied to plate.⁴ Zero signal currents per tube.⁵ Subscript indicates no grid-current flow.⁶ Subscript 2 indicates grid-current flow over part of input cycle.⁷ Zero-signal currents, two tubes.⁸ Cathode bias resistor should be adjusted for plate current of 10 ma.; minimum value 160 ohms.⁹ Grid bias -2 volts if separate oscillator excitation is used.⁹ Cathode resistor 300 ohms.

TABLE II—6.3-VOLT GLASS TUBES WITH OCTAL BASES

(For "G" and "GT" Type Tubes Not Listed Here, See Equivalent Type in Table I; Characteristics and Connections Will Be Identical)

Type	Name	Socket Connections ¹	Cathode	Fil. or Heater Volts	Amps.	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transcon- ductance Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type
6A5G	Triode Power Amplifier	6T	Htr.	6.3	1.0	Class-A Amplifier	250	-45	—	—	60	800	5250	4.2	2500	3.75	6A5G
6AB6G	Direct-Coupled Amplifier	7W	Htr.	6.3	0.5	Push-Pull Class AB	325	-68	—	—	80 ²	—	—	—	3000	15	6AB6G
6AC5G	High- μ Power Amplifier Triode	6Q	Htr.	6.3	0.4	Push-Pull Class AB	325	850 Ohm Cathode Resistor	—	—	80 ³	—	—	—	5000	10	6AC5G
6AC6G	Direct-Coupled Amplifier	7W	Htr.	6.3	1.1	Class-A Amplifier	250	0	Input	5	34	—	1800	72	8000	3.5	6AC6G
						Dynamic-Coupled Amp.	250	0	Output	—	—	—	—	—	10000	8	
						Class-A Amplifier	250	0	—	—	5 ²	36700	3400	125	7000	3.7	
						Class-A Amplifier	180	0	Input	7	45	—	3000	54	4000	3.8	

TABLE II—6.3-VOLT GLASS TUBES WITH OCTAL BASES—Continued

Type	Name	Socket Connections ¹	Cathode	Fil. or Heater Volts Amps.	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resist- ance, Ohms	Transcon- ductance Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type
6AD5G	High- μ Triode	6Q	Htr.	6.3 0.3	Class-A Amplifier	250	-2.0	—	—	0.9	—	1500	100	—	—	6AD5G
6AD6G	Electron-Ray Tube	7AG	Htr.	6.3 0.15	Indicator Tube	100	—	—	—	0 for 90°; -23 for 135°; 45 for 0°	—	—	—	—	—	6AD6G
6AE5G	Triode Amplifier	6Q	Htr.	6.3 0.3	Class-A Amplifier	95	-15	—	—	7.0	—	1200	4.2	—	—	6AE5G
6AE6G	Control Tube	7AH	Htr.	6.3 0.15	Indicator Control	250	-1.5	—	—	6.5 ⁴	—	1000	25	—	—	6AE6G
6AF5G	Triode Amplifier	6Q	Htr.	6.3 0.3	Class-A Amplifier	250	-1.5	—	—	4.5 ⁵	—	950	33	—	—	6AF5G
6AF6G	Electron-Ray Tube	7AG	Htr.	6.3 0.15	Indicator Tube	180	-18	—	—	7.0	—	1500	7.4	—	—	6AF6G
6B4G	Triode Power Amplifier	5S	Fil.	6.3 1.0	Power Amplifier	100	—	—	—	—	—	—	—	—	—	6B4G
6B6G	Duplex-Diode High- μ Triode	7V	Htr.	6.3 0.3	Detector-Amplifier	—	—	—	—	—	—	—	—	—	—	6B6G
6C8G	Twin Triode	8G	Htr.	6.3 0.3	Amp. 1 Section	250	-4.5	—	—	3.1	26000	1450	38	—	—	6C8G
6D8G	Pentagrid Converter	8A	Htr.	6.3 0.15	Inv. 2 Sections	250	-3.0	—	—	1.7 ¹	—	—	—	—	—	6D8G
6F8G	Twin Triode	8G	Htr.	6.3 0.6	Amplifier	250	-3.0	—	—	1.0 ³	—	—	—	—	—	6F8G
6G6G	Pentode Power Amplifier	7S	Htr.	6.3 0.15	Class-A Amplifier	135	-3.0	67.5	—	Cathode current 8.0 Ma. Cathode current 13.0 Ma.	7700	2600	20	—	—	6G6G
6H4GT	Diode Rectifier	5AF	Htr.	6.3 0.15	Detector	100	-3.0	100	—	—	—	—	—	—	—	6H4GT
6J8G	Triode Heptode	8H	Htr.	6.3 0.3	Converter	250	-3.0	100	—	2.8	—	—	—	—	—	6J8G
6K5G	High- μ Triode	5U	Htr.	6.3 0.3	Class-A Amplifier	100	-1.5	—	—	0.35	78000	900	70	—	—	6K5G
6K6G	Pentode Power Amplifier	7S	Htr.	6.3 0.4	Class-A Amplifier	250	-3.0	—	—	1.1	50000	1400	70	—	—	6K6G
6L5G	Triode Amplifier	6Q	Htr.	6.3 0.15	Class-A Amplifier	135	-5.0	—	—	3.5	—	1500	17	—	—	6L5G
6N6G	Direct-Coupled Amplifier	7W	Htr.	6.3 0.8	Power Amplifier	250	-13.5	—	—	5.0	—	1450	13.8	—	—	6N6G
6P5G	Triode Amplifier	6Q	Htr.	6.3 0.3	Class-A Amplifier	250	-3.0	—	—	1.2	—	1050	65	—	—	6P5G
6P7G	Triode-Pentode	7U	Htr.	6.3 0.3	Class-A Amplifier	250	-3.0	100	—	7.0	—	1450	1160	—	—	6P7G
6Q6G	Diode-Triode	6Y	Htr.	6.3 0.15	Class-A Amplifier	250	-3.0	100	—	1.7	—	—	—	—	—	6Q6G
6R6G	Pentode Amplifier	6AA	Htr.	6.3 0.3	Class-A Amplifier	250	-3.0	100	—	—	—	—	—	—	—	6R6G
6U7G	Triple Grid Variable- μ	7R	Htr.	6.3 0.3	R.F. Amplifier	—	—	—	—	—	—	—	—	—	—	6U7G
6V7G	Duplex Diode-Triode	7V	Htr.	6.3 0.3	Detector-Amplifier	135	-9.5	135	12	61	—	9000	215	2000	3.3	6V7G
6W6GT	Beam Power Amplifier	7AC	Htr.	6.3 1.25	Class-A Amplifier	250	-3.0	100	2	0.5	1500000	1225	1850	—	—	6W6GT
6W7G	Triple-Grid Det. Amp.	7R	Htr.	6.3 0.15	Class-A Amplifier	135	-13.5	135	3	60	—	7000	—	2000	3.6	6W7G
6Y6G	Beam Power Amplifier	7AC	Htr.	6.3 1.25	Class-A Amplifier	180	0	—	—	8.4 ²	—	—	—	12000	4.2	6Y6G
6Y7G	Twin Triode Amplifier	8B	Htr.	6.3 0.3	Class-B Amplifier	135	0	—	—	6 ²	—	—	—	9000	2.5	6Y7G
6Z7G	Twin Triode Amplifier	8B	Htr.	6.3 0.3	Class-B Amplifier	—	—	—	—	—	—	—	—	—	—	6Z7G
1223	Pentode Amplifier	7R	Htr.	6.3 0.3	Class-A Amplifier	300	-2.5 ¹	150	2.5	10	70000	5500	3850	—	—	1223
1231	Pentode Amplifier	8V	Htr.	6.3 0.45	Class-A Amplifier	—	—	—	—	—	—	—	—	—	—	1231
7000	Low-Noise Amplifier	7R	Htr.	6.3 0.3	Class-A Amplifier	—	—	—	—	—	—	—	—	—	—	7000

¹ Refer to Receiving Tube Diagrams. No connection to Pin No. 1.² No-signal value for 2 tubes.³ Per plate.⁴ Plate No. 1, remote cut-off.⁵ Plate No. 2, sharp cut-off.⁶ Through 200-ohm cathode resistor.

TABLE III — 7-VOLT LOKTAL-BASE TUBES

Type	Name	Socket Connections	Cathode	Heater	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen ¹ Current Ma.	Plate ¹ Current Ma.	Plate Resistance, Ohms	Transconductance, Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type
7A4	Triode Amplifier	5-AC	Htr.	7.0 0.32	Class-A Amplifier	250	- 8	—	—	9	7700	2600	20	—	—	7A
7A5	Beam Power Amplifier	6-AJ	Htr.	7.0 0.75	Class-A Amplifier	125	- 9	125	3.2/8	37.5/40	17000	6100	—	2700	1.9	7A5
7A6	Twin Diode	7-AJ	Htr.	7.0 0.32	Rectifier	250	- 3	100	2.0	8.6	800000	2000	1600	—	—	7A6
7A7	Remote Cut-off Pentode	8-V	Htr.	7.0 0.16	Osc.-Mixer	250	- 3	100	3.1	3.0	50000	—	—	Anode-grid 250 volts max. ²	—	7A7
7A8	Multigrid Converter	6-AE	Htr.	7.0 0.43	Class-A Amplifier	250	- 18	250	5.5/10	32/33	68000	2300	—	7600	3.4	7A8
7B5	Pentode Amplifier	8-W	Htr.	7.0 0.32	Class-A Amplifier	250	- 2	—	—	1.0	91000	1100	100	—	—	7B5
7B6	Duo-diode Triode	8-W	Htr.	7.0 0.16	R.F. Amplifier	250	- 3	100	2.0	8.5	700060	1700	1200	—	—	7B6
7B7	Remote Cut-off Pentode	8-V	Htr.	7.0 0.32	Osc.-Mixer	250	- 3	100	2.7	3.5	360000	—	—	Anode-grid 250 volts max. ²	—	7B7
7B8	Pentagrid Converter	8-X	Htr.	7.0 0.48	Class-A Amplifier	250	- 12.5	250	4.5/7	45/47	52000	4100	—	5000	4.5	7B8
7C5	Tetrode Amplifier	6-AA	Htr.	7.0 0.16	Class-A Amplifier	250	- 1	—	—	1.3	100000	1000	100	—	—	7C5
7C6	Duo-diode Triode	8-W	Htr.	7.0 0.16	R.F. Amplifier	250	- 3	100	0.5	2.0	2 meg.	1300	—	—	—	7C6
7C7	Pentode Amplifier	8-V	Htr.	7.0 0.32	Class-A Amplifier	250	- 3	100	1.6	7.5	700000	1300	—	—	—	7C7
7E7	Duo-diode Pentode	8-W	Htr.	7.0 0.32	Class-A Amplifier	250	- 2	—	—	2.3	44000	1600	70	—	—	7E7
7F7	Twin Triode	8-AC	Htr.	7.0 0.32	Class-A Amplifier	250	- 2	—	—	3.4	800000	—	—	—	—	7F7
7Q7	Pentagrid Converter	8-AL	Htr.	7.0 0.32	Osc.-Mixer	250	0	100	8	—	—	—	—	Grid No. 1 resistor 20000 ohms	—	7Q7

¹ Values to left of diagonal lines are for "no-signal" condition; values to right are "with signal."² Anode-grid voltage applied through 20000-ohm dropping resistor.³ Each triode.

TABLE IV — 6.3-VOLT GLASS RECEIVING TUBES

Type	Name	Base ⁴	Socket Connections ¹	Cathode	Fil. or Heater	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transconductance, Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type
6A3	Triode Power Amplifier	4-pin M.	4D	Fil.	6.3 1.0	Class-A Amplifier	250	- 45	—	—	60	800	5250	4.2	2500	3.2	6A3
6A4 ²	Pentode Power Amplifier	5-pin M.	5B	Fil.	6.3 0.3	Push-Pull Amplifier	325	- 68	Fixed Bias	—	40	—	—	—	3000	15	6A4
6A6	Twin Triode Amplifier	7-pin M.	7B	Htr.	6.3 0.8	Class-A Amplifier	100	- 6.5	Self Bias	1.6	9.7	83250	1200	100	11000	0.31	6A6
6A7	Pentagrid Converter	7-pin S.	7C	Htr.	6.3 0.3	Class-B Amplifier	180	- 12.0	100	3.9	22.0	45500	2200	100	8000	1.40	6A7
6AB5	Electron-Ray Tube	6-pin S.	6R	Htr.	6.3 0.15	Converter	250	0	—	—	—	—	—	—	8000	8.0	6AB5
6B5	Direct-Coupled Power Amplifier	6-pin M.	6D	Htr.	6.3 0.8	Indicator Tube	300	0	Cut-off Grid bias 7.5 v.	—	3.5	360000	—	—	10000	10.0	6B5
6B7	Duplex-Diode Pentode	7-pin S.	7D	Htr.	6.3 0.3	Class-A Amplifier	400	- 13	—	6.5	45	241000	2400	58	7000	4.0	6B7
6C6	Triple-Grid Detector Amplifier	6-pin S.	6F	Htr.	6.3 0.3	Push-Pull Amplifier	250	- 3.0	125	2.3	9.0	650000	1125	730	10000	20	6C6
						Pentode R.F. Amplifier	250	- 4.5	50	0.65	—	—	—	—	—	—	
						Pentode A.-F. Amplifier	250	- 3.0	100	0.5	2.0	exceeds 1.5 meg.	1225	exceeds 1500	—	—	
						Screen-Grid R.F. Amplifier	250	- 1.95	50	0.65	—	—	—	—	—	—	
						Bias Detector	250	- 1.95	50	0.65	—	—	—	—	—	—	

¹ Values to left of diagonal lines are for "no-signal" condition; values to right are "with signal."² Anode-grid voltage applied through 20000-ohm dropping resistor.³ Each triode.⁴ Base 4

TABLE IV—6.3-VOLT GLASS RECEIVING TUBES—Continued

Type	Name	Base ⁴	Socket Connections ¹	Cathode	Fil. or Heater		Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transconductance Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type
					Volts	Amps												
6C7	Duplex Diode Triode	7-pin S.	7G	Htr.	6.3	0.3	Class-A Amplifier	250	-9.0	—	—	4.5	—	20	1250	—	—	6C7
6D6	Triode-Grid Variable- μ Amplifier	6-pin S.	6F	Htr.	6.3	0.3	Screen-Grid R.F. Amplifier	250	-3.0	100	2.0	8.2	800000	1600	1280	—	—	6D6
6D7	Triode-Grid Amp.	7-pin S.	7H	Htr.	6.3	0.3	Mixer	250	-10.0	100	—	—	—	Oscillator peak volts = 7.0				6D7
6E5	Electron-Ray Tube	6-pin S.	6R	Htr.	6.3	0.3	Class-A Amplifier	250	-3.0	100	0.5	2.0	—	1600	1280	—	—	6E5
6E6	Twin Triode Amplifier	7-pin M.	7B	Htr.	6.3	0.6	Class-A Push-Pull Amplifier	180 250	-20 -27.5	Per plate — 11.5 Per plate — 18.0	—	—	4300 3500	1400 1700	6.0 6.0	15000 14000	0.75 1.6	6E6
6F7	Triode Pentode	7-pin S.	7E	Htr.	6.3	0.3	Triode Unit Amplifier	100	-3.0	—	—	3.5	16000	500	8	—	—	6F7
6G5/ 6U5	Electron-Ray Tube	6-pin S.	6R	Htr.	6.3	0.3	Pentode Unit Mixer	250	-3.0	100	1.5	6.5	850000	1100	900	—	—	6G5/ 6U5
							Indicator Tube	250	-10.0	100	0.6	2.8	—	Oscillator peak volts = 7.0				6G5/ 6U5
							Indicator Tube	250	Cut-off Grid Bias = 22 v.	—	—	0.24	—	Target Current 4 ma.				6H5
6H5	Electron-Ray Tube	6-pin S.	6R	Htr.	6.3	0.3	Indicator Tube	180	Cut-off Grid Bias = -12 v.	—	—	0.5	—	Target Current 2 ma.				6H5
6N5	Electron-Ray Tube	6-pin S.	6R	Htr.	6.3	0.15	Indicator Tube	250	Cut-off Grid Bias = -12 v.	—	—	0.24	—	Target Current 4 ma.				6N5
6T5	Electron-Ray Tube	6-pin S.	6R	Htr.	6.3	0.3	Indicator Tube	100	-1.5	55	—	1.8	550000	850	470	—	—	6T5
							Screen Grid R.F. Amplifier	180	-3.0	90	—	3.1	500000	1050	525	—	—	36
36	Tetode R.F. Amplifier	5-pin S.	5E	Htr.	6.3	0.3	Bias Detector	250	-3.0	90	—	3.2	550000	1080	525	—	—	36
								90	-5.0	55	—	—	Plate Current to be adjusted to 0.1 ma. with no signal					
								250	-8.0	90	—	—						
37	Triode Detector Amplifier	5-pin S.	5A	Htr.	6.3	0.3	Class-A Amplifier	90	-6.0	—	—	2.5	11500	800	9.2	—	—	37
							Bias Detector	180	-13.5	—	—	4.3	10200	900	9.2	—	—	
								250	-18.0	—	—	7.5	8400	1100	9.2	—	—	
								90	-10.0	—	—	—	Plate Current to be adjusted to 0.2 ma. with no signal					
								250	-28.0	—	—	—						
38	Pentode Power Amplifier	5-pin S.	5F	Htr.	6.3	0.3	Class-A Amplifier	100	-9.0	100	1.2	7.0	140000	875	120	15000	0.27	38
								180	-18.0	180	2.4	14.0	115000	1050	120	11600	1.00	
								250	-25.0	250	3.8	22.0	100000	1200	120	10000	2.50	
39 44	Variable- μ R.F. Amplifier Pentode	5-pin S.	5F	Htr.	6.3	0.3	Screen-Grid R.F. Amplifier	90	-3.0	90	1.6	5.4	375000	960	360	—	—	39
								180	min.	90	1.4	5.8	750000	1000	750	—	—	44
								250	-3.0	90	1.4	5.8	1000000	1050	1050	—	—	
41	Pentode Power Amplifier	6-pin S.	6B	Htr.	6.3	0.4	Class-A Amplifier	100	-7.0	100	1.6	9.0	103500	1450	150	12000	0.33	41
								180	-13.5	180	3.0	18.5	81000	1850	150	9000	1.50	
								250	-18.0	250	5.5	32.0	68000	2200	150	7600	3.40	
42	Pentode Power Amplifier	6-pin M.	6B	Htr.	6.3	0.7	Class-A Amplifier	250	-16.5	250	6.5	34.0	100000	2200	220	7000	3.0	42
47	Duplex-Diode High- μ Triode	6-pin S.	6G	Htr.	6.3	0.3	Triode Amplifier	250	-1.35	—	—	0.4	91000	1100	100	—	—	47
								250	-1.35	—	—	—	9500	1450	13.8	—	—	76
76	Triode Detector Amplifier	5-pin S.	5A	Htr.	6.3	0.3	Class-A Amplifier	250	-13.5	—	—	5.0	—	Plate current to be adjusted to 0.2 ma. with no signal				76
							Bias Detector	250	-20.0	—	—	—						
77	Triode-Grid Detector Amplifier	6-pin S.	6F	Htr.	6.3	0.3	Screen-Grid R.F. Amplifier	100	-1.5	60	0.4	1.7	650000	1100	715	—	—	77
								250	-3.0	100	0.5	2.3	1500000	1250	1500	—	—	
							Bias Detector	250	-1.95	50	—	—	Cathode current = 0.65 ma. Plate coupling resistor 250000 ohms					
78	Triode-Grid Variable- μ Amplifier	6-pin S.	6F	Htr.	6.3	0.3	Screen-Grid R.F. Amplifier	90	-1.3	90	1.3	6.4	315000	1275	400	—	—	78
								180	-3.0	75	1.0	4.0	1000000	1100	1100	—	—	
								250	min.	100	1.7	7.0	800000	1450	1160	—	—	
								250	—	125	2.6	10.5	600000	1650	990	—	—	

TABLE IV — 6.3-VOLT GLASS RECEIVING TUBES — Continued

Type	Name	Base ⁴	Socket Connections ¹	Cathode	Fil. or Heater Volts	Amps	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transconductance Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type
79	Twin Triode Amplifier	6-pin S.	6H	Htr.	6.3	0.6	Class-B Amplifier	180 250	0	—	—	—	7000 14000	—	—	7000 14000	5.5 8.0	79
85	Duplex Diode Triode	6-pin S.	6G	Htr.	6.3	0.3	Triode Unit as Class-A Amplifier	135 180 250	-10.5 -13.5 -20.0	—	—	3.7 6.0 8.0	11000 8500 7500	750 975 1100	8.3 8.3 8.3	25000 20000 20000	0.075 0.160 0.350	85
89	Triple-Grid Power Amplifier	6-pin S.	6F	Htr.	6.3	0.4	Class-A Triode Amplifier ⁶ Class-A Pentode Amplifier ⁷	160 180 250	-20.0 -22.5 -31.0	—	—	17.0 20.0 32.0	3300 3000 2600	1425 1550 1800	4.7 4.7 4.7	7000 6500 5500	0.300 0.400 0.900	89
1921 ⁸	Triple-Grid Amplifier	6-pin S.	6F	Htr.	6.3	0.3	Class-B Triode Amplifier ⁸	100 180 250	-10.0 -18.0 -25.0	100 180 250	1.6 3.0 5.5	104000 80000 70000	1200 1250 1800	125 125 125	—	13600 9400	2.50 3.50	1921
1603 ⁹	Triple-Grid Amplifier	6-pin M.	6F	Htr.	6.3	0.3	Class-A Amplifier	—	—	—	—	—	—	—	—	—	—	1603
7700 ¹⁰	Triple-Grid Amplifier	6-pin S.	6F	Htr.	6.3	0.3	Class-A Amplifier	—	—	—	—	—	—	—	—	—	—	7700
RK100	Mercury-vapor Triode	6-pin M.	6A	Htr.	6.3	0.6	Amplifier	100	-2.5	Cathode (G1) current 250 ma.	—	—	—	20000	50	—	—	RK100

¹ Refer to Receiving Tube Diagrams.² Suppressor grid, connected to cathode inside tube, not shown on base diagram.³ Also known as Type LA.⁴ S.—small; M.—medium.⁵ Current to input plate (P_i).⁶ Grids Nos. 2 and 3 connected to plate.⁷ Grid No. 2, screen; grid No. 3, suppressor.⁸ Grids Nos. 1 and 2 tied together; grid No. 3 connected to plate.⁹ Low noise, non-microphonic, tubes.¹⁰ Cathode Resistor 850 ohms.

TABLE V — 2.5-VOLT RECEIVING TUBES

Type	Name	Base ³	Socket Connections ¹	Cathode	Fil. or Heater Volts	Amps	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transconductance Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type
2A3	Triode Power Amplifier	4-pin M.	4D	Fil.	2.5	2.5	Class-A Amplifier	250	-45	—	—	60.0	800	5250	4.2	2500	3.5	2A3
2A5	Pentode Power Amplifier	6-pin M.	4B	Htr.	2.5	1.75	Push-Pull Amplifier	300	-62	Self-Bias	—	40.0	—	—	—	5000	10.0	2A5
2A6	Duplex-Diode Triode	6-pin S.	6G	Htr.	2.5	0.8	Class-A Amplifier	250	-16.5	Fixed-Bias	6.5	34.0	80000	2500	200	7000	3.0	2A6
2A7	Pentagrid Converter	7-pin S.	7C	Htr.	2.5	0.8	Triode as Class-A Amp. Converter	250	-1.35	—	—	0.4	91000	1100	100	—	—	2A7
2B6	Special Power Amplifier	7-pin M.	7J	Htr.	2.5	2.25	Amplifier	250	-24.0	—	—	40.0	5150	3500	18.0	5000	4.0	2B6
2B7	Duplex-Diode Pentode	7-pin S.	7D	Htr.	2.5	0.8	Pentode Amplifier	—	—	—	—	—	—	—	—	—	—	2B7
2E5	Electron-Ray Tube	6-pin S.	6R	Htr.	2.5	0.8	Indicator Tube	—	—	—	—	—	—	—	—	—	—	2E5
24-A	Tetrode R.F. Amplifier	5-pin M.	5E	Htr.	2.5	1.75	Screen-Grid R.F. Amp. Bias Detector	250	-3.0	90	1.7	4.0	600000	1050	630	—	—	24-A
27	Triode Detector-Amplifier	5-pin M.	5A	Htr.	2.5	1.75	Class-A Amplifier	250	-21.0	—	—	—	—	—	—	—	—	27
35	Variable-μ Amplifier	5-pin M.	5E	Htr.	2.5	1.75	Bias Detector	250	-30.0	—	—	—	—	—	—	—	—	35
							Screen-Grid R.F. Amp.	250	-3.0	90	2.5	6.5	400000	1050	420	—	—	

Characteristics same as Type 6B7 — Table IV

Characteristics same as Type 6E5 — Table IV

Plate current adjusted to 0.1 ma. with no signal

Plate current adjusted to 0.2 ma. with no signal

TABLE V—2.5-VOLT RECEIVING TUBES—Continued

Type	Name	Base ³	Socket Connections ¹	Cathode	Volts	Fil. or Heater Amps.	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transconductance Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type
45	Triode Power Amplifier	4-pin M.	4D	Fil.	2.5	1.5	Class-A Amplifier	180 250 275	-31.5 -50.0 -56.0	—	—	31.0 34.0 36.0	1650 1610 1700	9195 2175 2050	3.5 3.5 3.5	9700 3900 4600	0.82 1.60 2.00	45
46	Dual-Grid Power Amplifier	5-pin M.	5C	Fil.	2.5	1.75	Class-A Amplifier ⁴ Class-B Amplifier ⁵	250 300 400	-33.0 0 0	—	—	22.0	2380	2350	5.6	6400	1.25	46
47	Pentode Power Amplifier	5-pin M.	5B	Fil.	2.5	1.75	Class-A Amplifier	250	-16.5	250	6.0	31.0	60000	2500	150	7000	2.7	47
53	Twin Triode Amplifier	7-pin M.	7B	Htr.	2.5	2.0	Class-B Amplifier	250 300	0	—	—	—	—	—	—	8000 10000	8.0 10.0	53
55	Duplex-Diode Triode	6-pin S.	6G	Htr.	2.5	1.0	Class-A Amplifier	250	-20.0	—	—	8.0	7500	1100	8.3	20000	0.350	55
56	Triode Amplifier, Detector	5-pin S.	5A	Htr.	2.5	1.0	Class-A Amplifier Bias Detector	250 250	-13.5 -20.0	—	—	5.0	9500	1450	13.8	—	—	56
57	Triple-Grid Detector Amplifier	6-pin S.	6F	Htr.	2.5	1.0	Screen-Grid R.F. Amplifier Bias Detector	250 250	-3.0	100	0.5	2.0	exceeds 1.5 meg.	1295	exceeds 1500	—	—	57
58	Triple-Grid Variable- μ Amplifier	6-pin S.	6F	Htr.	2.5	1.0	Screen-Grid R.F. Amp. Mixer	250 250	-3.0 -10.0	100	2.0	8.2	800000	1600	1280	—	—	58
59	Triple-Grid Power Amplifier	7-pin M.	7A	Htr.	2.5	2.0	Class-A Triode ⁶ Class-A Pentode ⁷ Class-B Triode ⁸	250 300 400	-28.0 -18.0 0	250	9.0	35.0	2300 40000	2600 2500	6.0 100	5000 6000	1.25 3.0	59
RK15	Triode Power Amplifier	4-pin M.	4D ²	Fil.	2.5	1.75	Class-B Triode ⁸	400	0	—	—	—	—	—	—	—	20.0	RK15
RK16	Triode Power Amplifier	5-pin M.	5A	Htr.	2.5	2.0	Class-B Triode ⁸	400	0	—	—	—	—	—	—	—	—	RK16
RK17	Pentode Power Amplifier	5-pin M.	5F	Htr.	2.5	2.0	Class-B Triode ⁸	400	0	—	—	—	—	—	—	—	—	RK17

¹ Refer to Receiving Tube Diagrams.² Grid connection to cap; no connection to No. 3 pin.³ S.—small; M.—medium.⁴ Grid No. 2 tied to plate.⁵ Grids Nos. 1 and 2 tied together.⁶ Grids Nos. 2 and 3 connected to plate.⁷ Grid No. 2, screen; grid No. 3, suppressor.⁸ Grids Nos. 1 and 2 tied together; grid No. 3 connected to plate.

TABLE VI—2.0-VOLT BATTERY RECEIVING TUBES

Type	Name	Base ²	Socket Connections ¹	Cathode	Volts	Fil. or Heater Amps.	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transconductance Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type
1A4P	Variable- μ Pentode	4-pin S.	4M	Fil.	2.0	0.06	R.F. Amplifier	180	-3.0	67.5	0.8	2.3	1000000	750	750	—	—	1A4P
1A6	Pentagrid Converter	6-pin S.	6L	Fil.	2.0	0.06	Converter	180	-3.0 min.	67.5	2.4	1.3	500000	Anode grid (No. 2) 180 max. volts; 9.3 ma. Grid Leak 50000 ohms	—	—	—	1A6
1B4P	Pentode R.F. Amplifier	4-pin S.	4M	Fil.	2.0	0.06	R.F. Amplifier	180	-3.0	67.5	0.6	1.7	1500000	650	1000	—	—	1B4P
1B5/25S	Duplex-Diode Triode	6-pin S.	6M	Fil.	2.0	0.06	Triode Class-A Amplifier	135	-3.0	67.5	—	0.8	35000	575	20	—	—	1B5/25S
1C6	Pentagrid Converter	6-pin S.	6L	Fil.	2.0	0.12	Converter	180	-3.0 min.	67.5	2.0	1.5	750000	Anode grid (No. 2) 135 max. volts; 3.3 ma. Grid Leak 50000 ohms	—	—	—	1C6
1F4	Pentode Power Amplifier	5-pin M.	5K	Fil.	2.0	0.12	Class-A Amplifier	135	-4.5	135	2.6	8	200000	1700	340	16000	0.34	1F4

TABLE VI — 2.0-VOLT BATTERY RECEIVING TUBES — Continued

Type	Name	Base ²	Socket Connections ¹	Cathode	Fil. or Heater Volts Amps	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transconductance Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type
1F6	Duplex-Diode Pentode	6-pin S.	6W	Fil.	2.0 0.6	R.F. Amplifier	180	-1.5	67.5	0.6	2.0	1000000	650	650	—	—	1F6
15	R.F. Pentode Amplifier-Oscillator	5-pin S.	5F	Htr.	2.0 0.22	A.F. Amplifier	135	-1.0	135	—	—	Plate resistor 0.25 megohm Screen resistor 1.0 megohm	—	—	—	—	15
19	Twin-Triode Amplifier	6-pin S.	6C	Fil.	2.0 0.26	R.F. Amplifier	67.5	-1.5	67.5	0.3	1.85	800000	750	600	—	—	19
30	Triode Detector Amplifier	4-pin S.	4D	Fil.	2.0 0.06	Class-B Amplifier	135	0	—	—	—	Load plate-to-plate	—	—	10000	2.1	30
31	Triode Power Amplifier	4-pin S.	4D	Fil.	2.0 0.13	Class-A Amplifier	90	-4.5	—	—	—	11000	850	9.3	—	—	31
32	Tetrode R.F. Amplifier	4-pin M.	4K	Fil.	2.0 0.06	Class-A Amplifier	135	-9.0	—	—	—	10300	900	9.3	—	—	32
33	Pentode Power Amplifier	5-pin M.	5K	Fil.	2.0 0.26	Screen-Grid R.F. Amplifier	180	-30.0	—	—	—	4100	925	3.8	7000	0.185	33
34	Variable- μ Pentode R.F. Amplifier	4-pin M.	4M	Fil.	2.0 0.06	Class-A Amplifier	135	-3.0	67.5	0.4	1.7	3600	1050	3.8	5700	0.375	34
49	Dual-Grid Power Amplifier	5-pin M.	5C	Fil.	2.0 0.12	Class-A Amplifier ³ Class-B Amplifier ⁴	180	-20.0	—	—	—	950000	640	610	—	—	49
840	R.F. Pentode	5-pin S.	5J	Fil.	2.0 0.130	Class-A Amplifier	180	0	—	—	—	Plate current adjusted to 0.2 ma. with no signal	—	—	—	—	840
950	Pentode Power Amplifier	5-pin M.	5B	Fil.	2.0 0.12	Class-A Amplifier	135	-18.0	180	5.0	92.0	55000	1700	90	6000	1.4	950
RK24	Triode Amplifier	4-pin M.	4D	Fil.	2.0 0.06	Screen-Grid R.F. Amplifier	180	-13.5	135	3.0	14.5	50000	1450	70	7000	0.7	RK24

¹ See Receiving Tube Diagrams.

² S.—small, M.—medium.

³ Grid No. 2 tied to plate.

⁴ Grids Nos. 1 and 2 tied together.

TABLE VII — 2.0-VOLT BATTERY TUBES WITH OCTAL BASES

Type	Name	Socket Connections	Cathode	Fil. or Heater Volts Amps	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transconductance Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type
1C7G	Pentagrid Converter	7Z	Fil.	2.0 0.06	Converter	—	—	—	—	—	—	—	—	—	—	1C7G
1D5GP	Variable- μ R.F. Pentode	5Y	Fil.	2.0 0.06	R.F. Amplifier	—	—	—	—	—	—	—	—	—	—	1D5GP
1D7G	Pentagrid Converter	7Z	Fil.	2.0 0.06	Converter	—	—	—	—	—	—	—	—	—	—	1D7G
1E5GP	R.F. Amplifier Pentode	5Y	Fil.	2.0 0.06	R.F. Amplifier	—	—	—	—	—	—	—	—	—	—	1E5GP
1E7G	Double Pentode Power Amp.	8C	Fil.	2.0 0.24	Class-A Amplifier	135	-7.5	135	2.0	6.5	220000	1600	350	24000	0.65	1E7G
1F5G	Pentode Power Amplifier	6X	Fil.	2.0 0.12	Class-A Amplifier	—	—	—	—	—	—	—	—	—	—	1F5G
1F7GV	Duplex-Diode Pentode	7AD	Fil.	2.0 0.06	Detector-Amplifier	—	—	—	—	—	—	—	—	—	—	1F7GV
1G5G	Pentode Power Amplifier	6X	Fil.	2.0 0.12	Class-A Amplifier	90	-6	90	2.7	8.5	130000	1500	200	8500	0.3	1G5G
1H4G	Triode Amplifier	5S	Fil.	2.0 0.06	Detector-Amplifier	135	13.5	135	2.5	8.7	160000	1550	250	9000	0.55	1H4G
1H6G	Duplex-Diode Triode	7AA	Fil.	2.0 0.06	Detector-Amplifier	—	—	—	—	—	—	—	—	—	—	1H6G
1J5G	Pentode Power Amplifier	6X	Fil.	2.0 0.12	Class-A Amplifier	135	-16.5	135	2.0	7.0	—	—	100	13500	0.45	1J5G
1J6G	Twin Triode	7AB	Fil.	2.0 0.24	Class-B Amplifier	—	—	—	—	—	—	—	—	—	—	1J6G

¹ Refer to Receiving Tube Diagrams.

² Total current for both sections; no signal.

TABLE VIII — 1.5-VOLT FILAMENT DRY-CELL TUBES

Type	Name	Base	Socket Connections ¹	Filament	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transconductance, Micromhos	Amp. Factor	Load Resistance, Ohms	Power Output Watts	Type
1A5G	Pentode Power Amplifier	7-pin O.	6X	1.4 0.05	Class-A Amplifier	85 ³	-4.5 ³	85	0.7	3.5	300000	800	240	25000	0.1	1A5G
1A7G	Pentagrid Converter	8-pin O.	7Z	1.4 0.05	Osc.-Mixer	90	0	45 ⁴	0.6	0.55	600000	—	—	—	—	1A7G
1B7G	Pentagrid Converter	6-pin O.	7Z	1.4 0.1	Osc.-Mixer	90	0	45	1.3	1.5	350000	Grid No. 1 resistor 200,000 ohms	—	—	—	1B7G
1C5G	Pentode Power Amplifier	7-pin O.	6X	1.4 C.10	Class-A Amplifier	83 ³	-7 ³	83	1.6	7.0	110000	1500	165	9000	0.2	1C5G
1D8GT	Diode Triode Pentode	8-pin O.	—	1.4 0.1	Triode Amplifier Pentode Amplifier	90	-9.0	90	1.0	5.0	—	575 925	—	—	—	1D8GT
1E4G	Triode Amplifier	8-pin O.	5S ²	1.4 0.05	Class-A Amplifier	90	0	—	—	4.5	11000	1395	14.5	—	—	1E4G
1G4G	Triode Amplifier	7-pin O.	5S	1.4 0.05	Class-A Amplifier	90	-6.0	—	—	1.5	17000	825	14	—	—	1G4G
1G6G	Twin Triode	6-pin O.	7AB	1.4 0.1	Class-A Amplifier Class-B Amplifier	90	0	—	—	2.3	45000	675	30	—	—	1G6G
1H5G	Diode High- μ Triode	7-pin O.	5Z	1.4 0.05	Class-A Amplifier	90	0	—	—	1.7 ⁵	240000	275	65	—	—	1H5G
1N5G	Pentode R.F. Amplifier	7-pin O.	5Y	1.4 0.05	Class-A Amplifier	90	0	90	0.3	1.2	1500000	750	1160	—	—	1N5G
1N6G	Diode-Power-Pentode	6-pin O.	7AM	1.4 0.05	Class-A Amplifier	90	-4.5	90	0.6	3.1	300000	800	—	25000	100	1N6G
1P5G	Triple-Grid Pentode	5-pin O.	5Y	1.4 0.05	R.F. Amplifier	90	0	90	0.7	2.3	800000	800	640	—	—	1P5G
1Q5G	Tetode Power Amplifier	5-pin O.	6AF	1.4 0.1	Class-A Amplifier	85	-5.0	85	1.2	7.2	—	1950	—	9000	260	1Q5G
1T5GT	Beam Power Amplifier	7-pin O.	6AF	1.4 0.05	Class-A Amplifier	90	-4.5	90	1.6	9.5	—	1150	—	8000	270	1T5GT
CK501	Pentode Voltage Amplifier	5-pin P. ⁶ 7-pin O.	6X	1.25 0.033	Class-A Amplifier	30	0	30	0.06	0.3	1.0 meg. 1.5 meg.	325 300	—	—	—	CK501
CK502	Pentode Output Amplifier	5-pin P. ⁶ 7-pin O.	6X	1.25 0.033	Class-A Amplifier	30	0	30	0.13	0.55	500000	400	—	60000	3	CK502
CK503	Pentode Output Amplifier	5-pin P. ⁶ 7-pin O.	6X	1.25 0.033	Class-A Amplifier	30	0	30	0.33	1.5	150000	600	—	20000	6 ⁷	CK503
CK504	Pentode Output Amplifier	5-pin P. ⁶ 7-pin O.	6X	1.25 0.033	Class-A Amplifier	30	-1.25	30	0.09	0.4	500000	350	—	60000	3 ⁷	CK504
HY113	Triode Amplifier	5-pin P. ⁶	5K ⁸	1.4 0.07	Class-A Amplifier	45	-4.5	—	—	0.4	25000	250	6.3	40000	6.5	HY113
HY115	Pentode Voltage Amplifier	5-pin P. ⁶	5K	1.4 0.07	Class-A Amplifier	45	-1.5	22.5	0.008	0.03	5.9 meg. 1.3 meg.	58 270	300 370	—	—	HY115
HY125	Pentode Power Amplifier	5-pin P. ⁶	5K	1.4 0.07	Class-A Amplifier	45	-3.0	45	0.2	0.9	825000	310	255	50000	11.5	HY125
RK42	Triode Amplifier	4-pin S.	4D	1.5 0.6	Class-A Amplifier	90	-7.5	90	0.5	2.5	—	450	190	28000	90	RK42
RK43	Twin Triode Amplifier	6-pin S.	6C	1.5 0.12	Twin Triode Amplifier	135	-3	—	—	4.5	14500	900	13	—	—	RK43

¹ Refer to Receiving Tube Diagrams.² Internal shield connected to pin 1.³ Grid bias obtained from 90-volt "B" supply through self-biasing resistor.⁴ Obtained from 90-volt supply through 70,000-ohm dropping resistor.⁵ Per tube. Values to left of diagonal line for no-signal condition; values to right are with signal.⁶ Special miniature 5-pin peanut base. Also available with small-shell octal base.⁷ With 5-megohm grid resistor and 0.02- μ fd. grid coupling condenser.⁸ No screen connection.

TABLE IX — HIGH-VOLTAGE HEATER TUBES

Type	Name	Base ³	Socket Connections ¹	Heater	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transconductance, Micromhos	Amp. Factor	Load Resistance, Ohms	Power Output Watts	Type
12A5	Pentode Power Amplifier	7-pin M.	7F	12.6 0.3 6.3 0.6	Class-A Amplifier	100 180	-15 -27	100 180	4.0 9.0	18 40	—	—	—	5000	0.7 2.8	12A5
12A7	Rectifier-Pentode Power Amplifier	7-pin M.	7K	12.6 0.3	Class-A Amplifier Half-Wave Rectifier	135	-13.5	135	2.5	9.0	102000	975	100	13500	0.55	12A7

125 Max. Volts R.M.S. Output current 30 ma. Max.

TABLE IX — HIGH-VOLTAGE HEATER TUBES — Continued

Type	Name	Base ²	Socket Connections ¹	Heater		Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transcon-ductance, Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type		
12A8GT	Pentagrid Converter	8-pin O.	8A	12.6	0.15	Osc.-Mixer	250	- 3.0	100	2.4	9.2	Characteristics same as 6A8—Table I				—	—	12A8GT	
12B7	Triple-Grid Variable-μ	8-pin O.	8V	15.6	0.15	R.F. Amplifier	90	0	—	—	2.8	37000	2400	90	—	—	12B7		
12B8GT	Triode-Pentode	8-pin O.	8T	12.6	0.3	Class-A Triode	100	- 1	—	—	0.6	73000	1500	110	—	—	12B8GT		
12C8	Duplex-Diode Pentode	8-pin O.	8E	12.6	0.15	Class-A Pentode	90	- 3	90	2	7	200000	1800	360	—	—	12C8		
12E5GT	Triode Amplifier	6-pin O.	6Q	12.6	0.15	Class-A Amplifier	100	- 3	100	2	8	170000	2100	360	—	—	12E5GT		
12F5GT	Triode Amplifier	5-pin O.	5M	12.6	0.15	Class-A Amplifier	250	- 13.5	—	—	5.0	—	1450	13.8	—	—	12F5GT		
12J5GT	Triode Amplifier	6-pin O.	6Q	12.6	0.15	Class-A Amplifier	—	—	—	—	—	Characteristics same as 6F5—Table I	—	—	—	—	12J5GT		
12J7GT	Pentode Voltage Amplifier	7-pin O.	7R	12.6	0.15	Class-A Amplifier	—	—	—	—	—	Characteristics same as 6J7—Table I	—	—	—	—	12J7GT		
12K7GT	Remote Cut-off Pentode	7-pin O.	7R	12.6	0.15	R.F. Amplifier	—	—	—	—	—	Characteristics same as 6K7—Table I	—	—	—	—	12K7GT		
12Q7GT	Duplex-Diode Triode	7-pin O.	7V	12.6	0.15	Class-C Amplifier	—	—	—	—	—	Characteristics same as 6Q7—Table I	—	—	—	—	12Q7GT		
12SA7	Pentagrid Converter	8-pin O.	8R	12.6	0.15	Osc.-Mixer	—	—	—	—	—	Characteristics same as 6SA7—Table I	—	—	—	—	12SA7		
12SC7	Twin Triode	8-pin O.	8S	12.6	0.15	Osc.-Mixer	—	—	—	—	—	Characteristics same as 6SC7—Table I	—	—	—	—	12SC7		
12SF5GT	High-μ Triode	6-pin O.	8P	12.6	0.15	Class-A Amplifier	—	—	—	—	—	Characteristics same as 6SF5—Table I	—	—	—	—	12SF5GT		
12SJ7	Pentode Voltage Amplifier	8-pin O.	8N	12.6	0.15	Class-A Amplifier	—	—	—	—	—	Characteristics same as 6SJ7—Table I	—	—	—	—	12SJ7		
12SK7	Remote Cut-off Pentode	8-pin O.	8N	12.6	0.15	R.F. Amplifier	—	—	—	—	—	Characteristics same as 6SK7—Table I	—	—	—	—	12SK7		
12SQ7	Duplex-Diode Triode	8-pin O.	8Q	12.6	0.15	Class-A Amplifier	—	—	—	—	—	Characteristics same as 6SQ7—Table I	—	—	—	—	12SQ7		
21A7	Triode Hexode Converter	8-pin O.	8AR	21	0.16	Osc.-Mixer	250 150	- 3.0 - 3.0	100 Triode	2.8 3.5	1.3 3.5	— —	975 1900	— —	— 32	— —	— —	21A7	
25A6	Pentode Power Amplifier	7-pin O.	7S	25	0.3	Class-A Amplifier	95 135 180	- 15 - 20 - 20	95 135 135	4 8 7.5	20 37 38	45000 35000 40000	2000 2450 2500	90 85 100	4500 4000 5000	0.9 2.0 2.75	25A6		
25A7G	Rectifier-Amplifier	8-pin O.	8F	25	0.3	Class-A Amplifier Rectifier	100	- 15	100	4.0	20.5	50000	1800	90	4500	0.77	25A7G		
25AC5G	Triode Power Amplifier	6-pin O.	6Q	25	0.3	Class-A Amplifier	110 165	+ 15 —	— —	— —	45 3800	— —	Used in dynamic-coupled circuit with 6AF5G driver	58 3500	9000 3500	2.0 3.3	25AC5G		
25B5	Direct-Coupled Triodes	6-pin S.	6D	25	0.3	Class-A Amplifier	110	0	110	7	45	11400	2200	25	2000	2.0	25B5		
25B6G	Pentode Power Amplifier	7-pin O.	7S	25	0.3	Class-A Amplifier	95	- 15	95	4	45	—	4000	—	2000	1.75	25B6G		
25B8GT	Triode Pentode	8-pin O.	8T	25	0.15	Class-A Amplifier	Characteristics same as 12B8GT										—	—	25B8GT
25C6G	Beam Power Amplifier	7-pin O.	7AC	25	0.3	Class-A Amplifier	135 200	- 13.5 - 14	135 135	3.5/11.5 2.2/9	58/60 60/66	9300 18300	7000 7100	— —	9000 2600	3.6 6.0	25C6G		
25D8GT	Diode-Triode-Pentode	8-pin O.	8AF	25	0.15	Class-A Amplifier	100	- 1	100	Triode	0.5	—	1900	100	—	—	25D8GT		
25L6	Beam Power Amplifier	7-pin O.	7AC	25	0.3	Class-A Amplifier	110	- 8	110	3.5-10.5	45-48	10000	8000	80	2000	2.2	25L6		
25N6G	Direct-Coupled Triodes	7-pin O.	7W	25	0.3	Class-A Amplifier	110	0	110	7	45	11400	2200	25	2000	2.0	25N6G		
32L7GT	Diode-Beam Tetrode	8-pin O.	8F	32.5	0.3	Class-A Amplifier	110	- 7.5	110	3	40	15000	6000	—	2500	1.5	32L7GT		
35A5	Beam Power Amplifier	8-pin O.	6AA	35	0.16	Class-A Amplifier	Rectifier Section 125 volts R.M.S. Max. 60 Ma. D.C.										—	—	35A5
35L6G	Beam Power Amplifier	7-pin O.	7AC	35	0.15	Class-A Amplifier	110	- 7.5	110	3/7	40/41	13800	5800	—	2500	1.5	35L6G		
50L6GT	Beam Power Amplifier	7-pin O.	7AC	50	0.15	Class-A Amplifier	110	- 7.5	110	4/11	49/50	—	8200	82	2000	2.2	50L6GT		

TABLE IX—HIGH-VOLTAGE HEATER TUBES—Continued

Type	Name	Base ²	Socket Connections ¹	Heater	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transconductance Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type
70A7GT	Diode-Beam Tetrode	8-pin O.	—	70 0.15	Class-A Amplifier	110	-7.5	110	3.0	40	—	5800	80	2500	1.5	70A7GT
70L7GT	Diode-Beam Tetrode	8-pin O.	8AA	70 0.15	Rectifier	110	-7.5	110	3/6	40/43	15000	7500	—	2000	1.8	70L7GT
43	Pentode Power Amplifier	6-pin M.	6B	25.0 0.3	Class-A Amplifier	95 135	-15.0 -20.0	95 135	4.0 7.0	20.0 34.0	45000 35000	9000 2300	90 80	4500 4000	0.90 2.00	43
48	Tetrode Power Amplifier	6-pin M.	6A	30.0 0.4	Class-A Amplifier	96 125	-19.0 -20.0	96 100	9.0 9.5	59.0 56.0	—	3800 3900	—	1500 1500	2.0 2.5	48

¹ M.—medium; S.—small; O.—octal.

² Refer to Receiving Tube Diagrams.

TABLE X—MISCELLANEOUS RECEIVING TUBES

Type	Name	Base ²	Socket Connections ¹	Fil. or Heater	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transconductance Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type
00-A	Triode Detector	4-pin M.	4D	5.0 0.25	Grid Leak Detector	45	—	—	—	1.5	30000	666	20	—	—	00-A
01-A	Triode Detector Amplifier	4-pin M.	4D	5.0 0.25	Class-A Amplifier	90 135	-4.5 -9.0	—	—	2.5 3.0	11000 10000	795 800	8.0 8.0	—	—	01-A
3A8GT	Diode Triode Pentode	8-pin O.	8AS	1.4 0.1	Class-A Triode	90	0	90	0.3	0.15	240000	975	65	—	—	3A8GT
3C5GT	Power Output Pentode	7-pin O.	—	2.8 0.05	Class-A Pentode	90	—	90	1.4	6.0	600000	750	—	8000 10000	0.24 0.26	3C5GT
3Q5GT	Beam Power Amplifier	7-pin O.	—	1.4 0.1	Class-A Amplifier	90	-4.5	90	1.6 1.0	9.5 7.5	—	2100 1800	—	8000	0.27 0.25	3Q5GT
10	Triode Power Amplifier	4-pin M.	4D	7.5 1.25	Class-A Amplifier	350 425	-31.0 -39.0	—	—	16.0 18.0	5150 5000	1550 1600	8.0 8.0	11000 10200	0.9 1.6	10
11	Triode Detector Amplifier	4-pin M.	4D	1.1 0.25	Class-A Amplifier	90	-4.5	—	—	9.5 3.0	15500 15000	495 440	6.6 6.6	—	—	11
12	Triode Power Amplifier	4-pin S.	4D	3.3 0.132	Class-A Amplifier	90	-16.5 -22.5	—	—	3.0 6.5	8000 6300	415 525	3.3 3.3	9600 6500	0.045 0.110	12
20	Tetrode R.F. Amplifier	4-pin M.	4K	3.3 0.132	Screen-Grid R.F. Amplifier	135 135	-1.5 -1.5	45.0 67.5	0.6 1.3	1.7 3.7	785000 395000	375 500	270 160	—	—	20
26	Triode Amplifier	4-pin M.	4D	1.5 1.05	Class-A Amplifier	90 180	-7.0 -14.5	—	—	2.9 6.2	8900 7300	935 1150	8.3 8.3	—	—	26
40	Triode Voltage Amplifier	4-pin M.	4D	5.0 0.25	Class-A Amplifier	135 180	-1.5 -3.0	—	—	0.2 0.2	150000 150000	200 200	30 30	—	—	40
4A6G	Twin Triode Amplifier	8-pin O.	8L	4.3 0.06	Class-A Amplifier ¹	90	-1.5	—	—	2.2	13300	1500	20	—	—	4A6G
50	Triode Power Amplifier	4-pin M.	4D	7.5 1.25	Class-A Amplifier	300 400 450	-54.0 -70.0 -84.0	—	—	35.0 55.0 55.0	2000 1800 1800	1900 2100 2100	3.8 3.8 3.8	8000 4600 4350	1.0 1.6 4.6	50
71-A	Triode Power Amplifier	4-pin M.	4D	5.0 0.25	Class-A Amplifier	90 180	-19.0 -43.0	—	—	10.0 20.0	9170 1750	1400 1700	3.0 3.0	3000 4800	0.195 0.790	71-A
99	Triode Detector Amplifier	4-pin S.	4D	3.3 0.063	Class-A Amplifier	90	-4.5	—	—	2.5	15500	425	6.6	—	—	99

TABLE X—MISCELLANEOUS RECEIVING TUBES—Continued

Type	Name	Base ²	Socket Connections ¹	Cathode	Fil. or Heater Volts	Amps.	Use	Plate Supply Volts	Grid Bias	Screen Volts	Screen Current Ma.	Plate Current Ma.	Plate Resistance, Ohms	Transconductance Micromhos	Amp. Factor	Load Resistance Ohms	Power Output Watts	Type
112A	Triode Detector Amplifier	4-pin M.	4D	Fil.	5.0	0.25	Class-A Amplifier	90 180	-4.5 -13.5	—	—	5.0 7.7	5400 4700	1575 1800	8.5 8.5	—	—	112A
183	Power Triode	4-pin M.	4D	Fil.	5.0	1.25	Class-A Amplifier	250	60	—	—	25	18000	1800	3.2	4500	2.0	183
257	Power Pentode	5-pin M.	5B	Fil.	5.0	0.30	Class-A Amplifier	110	21.5	110	7	20	41000	1350	55	6000	0.8	257
485	Triode	5-pin S.	5A	rtr.	3.0	1.30	Class-A Amplifier	180	9.0	—	—	6.0	9300	1350	12.5	—	—	485
864	Triode Amplifier	4-pin S.	4D	Fil.	1.1	0.25	Class-A Amplifier	90 135	-4.5 -9.0	—	—	2.9 3.5	13500 19700	610 645	8.2 8.2	—	—	864
954 ⁷	Pentode Detector, Amplifier	Special	A ⁷	Htr.	6.3	0.15	Class-A Amplifier	250	-3	100	0.7	2.0	1.5 megohms	1400	2000	—	—	954
955 ⁷	Triode Detector, Amplifier	Special	B ⁷	Htr.	6.3	0.15	Class-A Amplifier	250	-5	100	—	4.5	12500	2000	25	20000	0.135	955
956 ⁷	Triple-Grid Variable- μ R.F. Amplifier	Special	/A ⁷	Htr.	6.3	0.15	Oscillator	180	-35	—	—	—	7	D.C. Grid Current App. 1.5 ma.	—	—	0.5	956
957 ⁷	Triode Det., Amp., Osc.	Special	C ⁷	Fil.	1.25	0.05	Mixer	250	-10	100	—	—	800000	1800	1440	—	—	957
958 ⁷	Triode A.F. Amp., Osc.	Special	C ⁷	Fil.	1.25	0.1	Class-A Amplifier	135	-5	—	—	2.0	24500	650	16	—	—	958
959 ⁷	Pentode Detector, Amplifier	Special	D ⁷	Fil.	1.25	0.05	Class-A Amplifier	135	-7.5	—	—	3.0	10000	1200	12	—	—	959
1609	Pentode Amplifier	5-pin S.	5B	Fil.	1.1	0.25	Class-A Amplifier	135	-3	67.5	0.4	1.7	800000	600	480	—	—	1609

¹ Refer to Receiving Tube Diagrams.
² M—Medium; S—Small.
³ Cathode terminal is mid-point of filament; use series connection with 4 volts, parallel with 2 volts.
⁴ Triodes connected in parallel.

⁵ Idling current, both plates.
⁶ Filament mid-point tap permits series or parallel connection.
⁷ "Acorn" type; miniature, unbase tubes for ultra-high frequencies. See Acorn Tube Socket Connections.

TABLE XI—CONTROL AND REGULATOR TUBES

Type	Name	Base ¹	Socket Connections ²	Cathode	Fil. or Heater Volts	Amps.	Use	Peak Anode Voltage	Max. Anode Current ³	Minimum Starting Voltage	Operating Voltage	Operating Current ³	Grid Resistor	Tube Voltage Drop	Type
0A4G	Gas Triode	6-pin O.	4V	Cold	—	—	Cold-Cathode Starter-Anode Relay Tube	With 105-180-volt a.c. anode supply, peak starter-anode a.c. voltage is 70, peak r.f. voltage 55	100	—	—	—	—	—	0A4G
2A4G	Thyratron	8-pin O.	5S	Fil.	2.5	2.5	Control Tube	200	—	125	90	10-50	—	15	2A4G
874	Voltage Regulator	4-pin M.	4S	—	—	—	Voltage Regulator ³	—	—	—	40-60	1.7	—	—	874
876	Current Regulator	Mogul	—	—	—	—	Current Regulator ³	—	—	—	—	—	—	—	876
884	Gas Triode	6-pin O.	6Q	Htr.	6.3	0.6	Sweep Circuit Oscillator	300	300	—	—	2	25000 ⁴	—	884
885	Gas Triode	5-pin S.	5A	Htr.	2.5	1.4	Grid-Controlled Rectifier	350	300	—	—	75	25000 ⁴	—	885
886	Current Regulator	Mogul	—	—	—	—	Same as Type 884	—	—	—	—	—	—	—	886
KY21	Gas Triode	4-pin M.	—	Fil.	2.5	10.0	Current Regulator ³	—	—	—	40-60	2.05	—	—	KY21
RK62	Gas Triode	4-pin S.	4D	Fil.	1.4	0.05	Grid-Controlled Rectifier	45	1.5	—	30-45	0.1-1.5	—	15	RK62
RM208	Permatron	4-pin M.	—	Fil.	2.5	5.0	Control Rectifier	7500 ⁵	1000	—	—	—	—	15	RM208

¹ Refer to Receiving Tube Diagrams.
² M—Medium; S—Small.
³ Cathode terminal is mid-point of filament; use series connection with 4 volts, parallel with 2 volts.
⁴ Triodes connected in parallel.
⁵ Characteristics same as Type 884.

TABLE XI—CONTROL AND REGULATOR TUBES—Continued

Type	Name	Base ¹	Socket Connections ²	Cathode	Fil. or Heater Volts	Amps.	Use	Peak Anode Voltage	Max. Anode Current ³	Minimum Starting Voltage	Operating Voltage	Operating Current ³	Grid Resistor	Tube Voltage Drop	Type
RM209	Penatron	4-pin M.	—	Fil.	5.0	10.0	Controlled Rectifier ⁷	7500 ⁸	5000	—	—	—	—	15	RM209
VR90	Voltage Regulator	7-pin O.	4SA	—	—	—	Voltage Regulator	—	—	185	90	10-30 ⁹	—	—	VR90
VR105	Voltage Regulator	6-pin O.	4SB	—	—	—	Voltage Regulator	—	—	137	105	5-30 ⁹	—	—	VR105
VR150	Voltage Regulator	6-pin O.	4SB	—	—	—	Voltage Regulator	—	—	180	150	5-30 ⁹	—	—	VR150
KY866	Mercury Vapor Triode	4-pin M.	F ¹⁰	Fil.	2.5	5.0	Grid-Controlled Rectifier	10000	1000	100-150	—	—	—	10-24	KY866
967	Mercury Vapor Triode	4-pin M.	F ¹⁰	Fil.	2.5	5.0	Grid-Controlled Rectifier	2500	500	—	—	—	—	8	967
2050	Gas Tetrode	8-pin O.	8BA	Htr.	6.3	0.6	Grid-Controlled Rectifier	650	100	—	—	—	0.1-10 meg.	—	2050
2051	Gas Tetrode	8-pin O.	8BA	Htr.	6.3	0.6	Grid-Controlled Rectifier	350	75	—	—	—	0.1-10 meg.	14	2051

¹ M—Medium; S—Small; O—Octal.² Refer to Receiving Tube Diagrams.³ In ma.⁴ Not less than 1000 ohms per grid volt; 500,000 ohms max.⁵ For use in series with power transformer primary.⁶ For use as self-quenching super-regenerative detector with high-resistance relay (5000-10000 ohms) in anode circuit.⁷ For use as grid-controlled rectifier or with external magnetic control. RM-208 has characteristics of 866, RM-209 of 872.⁸ When under control peak inverse rating is reduced to 2500.⁹ Sufficient resistance must be used in series with tube to limit current to 30 ma.¹⁰ Refer to Transmitting Tube Diagrams.¹¹ At 1000 anode volts.¹² At 350 anode volts and O Grid No. 2 volts.¹³ At 650 anode volts and O Grid No. 2 volts.

TABLE XII—CATHODE-RAY TUBES AND KINESCOPES

Type	Name	Socket Connections ¹	Heater Volts	Amps.	Use	Size	Anode No. 1 Voltage	Anode No. 2 Voltage	Cut-Off Grid Voltage ²	Grid No. 2 Voltage	Signal-Swing Voltage	Max. Input Voltage ³	Screen Input Power ⁴	Deflection Sensitivity ⁵ D ₁ D ₂ D ₃ D ₄	Screen Persistence ⁶	Pattern Color ⁶	Type
902	Electrostatic Cathode-Ray	A	6.3	0.6	Oscillograph	2"	600 150	400 100	— 80	—	—	350	5	0.19 0.22 0.28 0.33	P1	Green	902
903	Electromagnetic Cathode-Ray	B	2.5	2.1	Oscillograph	9"	7000 1360	4600 900	— 120	250	—	—	10	—	P1	Green	903
904	Electrostatic-Magnetic Cathode-Ray	C	2.5	2.1	Oscillograph	5"	3000 630	1000 210	— 140	250	—	—	10	0.09 0.13 0.40	P1	Green	904
905	Electrostatic Cathode-Ray	D	2.5	2.1	Oscillograph	5"	2000 450	1000 225	— 60	100	—	1000	10	0.19 0.23 0.38 0.46	P1	Green	905
906	Electrostatic Cathode-Ray	E	2.5	2.1	Oscillograph	3"	1500 475	1200 345	—	—	—	600	10	0.22 0.29 0.33 0.35	P1	Green	906
907	Electrostatic Cathode-Ray	D	2.5	2.1	Oscillograph	5"	1000 285	800 230	— 70	—	—	—	—	0.41 0.44 0.55 0.58	P4	White	907
908	Electrostatic Cathode-Ray	E	2.5	2.1	Oscillograph	3"	600 170	400 128	—	—	—	—	—	0.81 0.87	P5	Blue	908

Characteristics same as Type 905

Characteristics same as Type 906

TABLE XII—CATHODE-RAY TUBES AND KINESCOPIES—Continued

Type	Name	Socket Connections ¹	Heater	Use	Size	Anode No. 2 Voltage	Anode No. 1 Voltage	Cut-Off Grid Voltage ²	Grid No. 2 Voltage	Signal-Swing Voltage	Max. Input Voltage ³	Screen Input Power ⁴	Deflection Sensitivity ⁵	Screen Persistence ⁶	Pattern Color ⁶	Type
			Volts	Amps.									D ₁ D ₂	D ₃ D ₄		
909	Electrostatic Cathode-Ray	D	2.5	2.1	Oscillograph	5"	15000	3000	—125	—	—	—	—	—	Blue	909
910	Electrostatic Cathode-Ray	E	2.5	2.1	Oscillograph	3"	10000	2000	—125	—	—	10	0.028	0.034	Blue	910
911	Electrostatic Cathode-Ray	E	2.5	2.1	Oscillograph	3"	5000	1000	—	—	—	—	0.041	0.051	Green	911
912	Electrostatic Cathode-Ray	F	2.5	2.1	Oscillograph	5"	500	100	—90	—	—	5	0.083	0.108	Green	912
913	Electrostatic Cathode-Ray	A	6.3	0.6	Oscillograph	1"	500	50	—	—	—	—	0.07	0.10	Green	913
914	Electrostatic Cathode-Ray	G	2.5	2.1	Oscillograph	9"	7000	1500	—125	—	—	10	0.15	0.21	Green	914
1800	Electromagnetic Kinescope	B	2.5	2.1	Television	9"	5000	915	—	—	—	—	0.073	0.093	Yellow	1800
1801	Electromagnetic Kinescope	H	2.5	2.1	Television	5"	6000	1250	—75	—	—	10	0.102	0.130	Yellow	1801
1802	Electrostatic Cathode-Ray	I	6.3	0.6	Picture Tube	5"	4500	925	—85	—	—	10	0.204	0.260	Green	1802
1803	Kinescope	B	2.5	2.1	Television	12"	3000	450	—35	—	—	—	—	—	White	1803
1804	Kinescope	B	2.5	2.1	Television	9"	2000	425	—85	—	—	—	0.3	0.33	White	1804
1805	Electrostatic Cathode-Ray	I	6.3	0.6	Picture Tube	5"	1500	310	—62	—	—	10	0.4	0.44	Green	1805
2302	Electrostatic Cathode-Ray	A	6.3	0.6	Oscillograph	2"	1200	250	—50	—	—	—	0.5	0.55	White	1805
2005	Electrostatic Cathode-Ray	A ⁸	2.5	2.1	Television	5"	7000	1460	—75	—	—	10	—	—	Green	2002
24-XH	Electrostatic Cathode-Ray	A	6.3	0.6	Oscilloscope	2"	6000	1240	—75	—	—	10	—	—	Green	2005
							600	120	—	—	—	—	0.17	0.21	Green	24-XH
							500	100	—	—	—	—	0.23	0.28	White	
							400	80	—	—	—	—	0.16	0.17	White	
							2000	1000	—35	—	—	10	0.18	0.20	Med.	
							1500	700	—	—	—	—	0.24	0.26	—	
							600	120	—	—	—	—	0.5	0.56	—	
							500	100	—	—	—	—	0.14	0.16	—	
							400	80	—	—	—	—	0.17	0.19	—	
							400	80	—	—	—	—	0.21	0.23	—	

¹ Refer to Cathode-Ray Tube Socket Connections.² For current cut-off. Control grid should never be allowed to go positive.³ Between Anode No. 2 and any deflecting plate.⁴ In mw./sq. cm., max.⁵ In mm./volt d.c.⁶ Phosphorescent material used in screen determines persistence.⁷ P₁ is phosphor of medium persistence, P₂ long, P₃ also medium but especially suited for television, P₄ same as P₃ but white, and P₅ short persistence for oscillographic use.⁸ The 911 is identical to 906 except for the gun material, which is designed to be especially free from magnetization effects.⁹ Cathode connected to pin 7.